

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously presented) An apparatus configured to control an automation function, comprising:

two or more automation modules selected from a plurality of interchangeable automation modules and connectable into a single physical assembly, each automation module including,

an enclosure including a physical interface that is capable of physically coupling with any others of the plurality of automation modules;

a data interface that is capable of data coupling with any others of the plurality of automation modules to exchange data with any others of the plurality of automation modules ;

a processor coupled to the data interface; and

a functional component operable by the processor for performing an independent automation task; and

wherein the data interfaces of at least two of the two or more automation modules are coupled to exchange data communications for coordinating the respective functional components of the automation modules to perform the automation function.

2. (Previously presented) The apparatus as in Claim 1, wherein the data interfaces of the two or more automation modules are configured to transfer data via an electrical power interface.

3. (Original) The apparatus as in Claim 1, wherein the data interfaces of the automation modules are accessible via a computing arrangement.

4. (Original) The apparatus as in Claim 3, wherein the computing arrangement actively controls the automation function.

5. (Original) The apparatus as in Claim 3, wherein the computing arrangement is configured to communicate a configuration to the apparatus for coordinating the functional components, and wherein the processors of the automation modules are configured to perform the automation function based on the configuration.

6. (Previously presented) The apparatus as in Claim 1, wherein the two or more automation modules include a wireless communications module.

7. (Original) The apparatus as in Claim 6, wherein the wireless communications module includes a cellular communications module compatible with a cellular communications network.

8. (Original) The apparatus as in Claim 7, wherein the cellular communications module is arranged to receive data from a mobile terminal to control at least one of the automation modules.

9. (Original) The apparatus as in Claim 7, wherein the cellular communications module is arranged to send data to a mobile terminal to communicate data originating from at least one of the automation modules.

10. (Original) The apparatus as in Claim 1, wherein the independent automation task comprises at least one of data input, control output, and external communications.

11. (Previously presented) The apparatus as in Claim 1, wherein the two or more automation modules further comprise a mechanical interface that allows additional automation modules to connect to the single physical assembly.

12. (Previously presented) A method for performing an automatic control function, comprising:

selecting first and second automation modules from a plurality of interchangeable automation modules, each of the plurality of automation modules configured for performing an independent function and capable of data coupling with any others of the plurality of automation modules to exchange data with any others of the plurality of automation modules;

connecting the first and second automation modules into a single physical assembly via physical interfaces of the first and second automation modules, wherein the physical interfaces are capable of physically coupling with any others of the plurality of automation modules;

coordinating the independent functions of the first and second automation modules by communicating data between the first and second automation modules; and

performing the automatic control function based on the coordinated independent functions of the first and second automation modules.

13. (Original) The method of Claim 12, further comprising communicating a control command from a mobile terminal to at least one of the automation modules.

14. (Original) The method of Claim 12, further comprising communicating data originating from at least one of the automation modules to a mobile terminal.

15. (Original) The method of Claim 12, wherein coordinating the independent functions of the first and second automation modules further includes communicating from a computing arrangement to the automation modules a configuration for coordinating the independent functions of the first and second automation modules.

16. (Original) The method of Claim 12, wherein performing the automatic control function includes communicating commands from a computing arrangement to the

automation modules to coordinate the functions of the first and second automation modules.

17. (Original) The method of Claim 12, wherein the independent functions of the first and second automation modules comprise at least one of data input, control output, and external communications.

18. (Cancelled)

19. (Previously presented) A system for controlling an automation function, the system comprising:

two or more control devices each comprising one or more automation modules selected from a plurality of interchangeable automation modules, wherein at least one of the control devices comprises two or more of the automation modules capable of being coupled into a single physical assembly,

wherein each of the automation modules includes,

an enclosure including a physical interface that is capable of physically coupling with any others of the plurality of automation modules;

a data interface that is capable of data coupling with any others of the plurality of automation modules and exchanging data with any other automation modules of the plurality of automation modules;

a processor coupled to the data interface;

a functional component operable by the processor for performing an independent automation task; and

wherein the data interfaces of the plurality of automation modules are coupled to exchange data communications for coordinating the respective functional components of the automation modules to perform a function of the control device; and

wherein the control devices are configured to communicate with each other via the data interfaces of at least one of the automation modules of the respective control devices

to coordinate the functions of the respective control devices to perform the automation function.

20. (Original) The system as in Claim 19, wherein the data interfaces of the automation modules are configured to transfer data via an electrical power interface.

21. (Original) The system as in Claim 19, further comprising a computing arrangement coupled to communicate with the automation modules.

22. (Original) The system as in Claim 21, wherein the computing arrangement actively controls the automation function.

23. (Original) The system as in Claim 21, wherein the computing arrangement is configured to communicate a configuration to the control devices to coordinate the functions of the control devices, and wherein the processors of the automation modules are configured to perform the functions of the control devices based on the configuration.

24. (Original) The system as in Claim 19, wherein the automation modules include a wireless communications module.

25. (Original) The system as in Claim 24, wherein the wireless communications module includes a cellular communications module compatible with a cellular communications network.

26. (Original) The system as in Claim 25, further comprising a mobile terminal arranged to communicate data with the cellular communications module.

27. (Original) The system as in Claim 19, wherein the independent automation task comprises at least one of data input, control output, and external communications.

28-32. (Cancelled)

33. (Currently amended) An automation module operable with a plurality of other automation modules for performing an automation function, comprising:

means for ~~connecting~~ physically coupling with any of the plurality of other automation modules to form a single physical assembly;

~~means for physically coupling with any others of the plurality of automation modules;~~

means for data coupling with any of the plurality of other automation modules to exchange data with any others of the plurality of automation modules;

means for performing an independent automation task; and

means for exchanging data with other automation modules of the assembly to coordinate the independent automation task with one or more independent automation tasks of the other automation modules to perform the automation function.